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TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Application Number	09/779,789
Filing Date	02/07/2001
First Named Inventor	Behrooz REZVANI
Group Art Unit	2637
Examiner Name	AHN, SAM K
Total Number of Pages in This Submission	VELCP008X1C

ENCLOSURES (check all that apply)

<input type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Assignment Papers # (for an Application)	<input type="checkbox"/> After Allowance Communication to Group
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment / Reply	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition #	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address	<input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Terminal Disclaimer	1- Request for Certificate of Correction of Patent 6,985,521
<input type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> Request for Refund	2-PTO/SB/44
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input checked="" type="checkbox"/> Return Receipt Postcard	
<input type="checkbox"/> Response to Missing Parts/ Incomplete Application		
<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53		
	Remarks	

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	IP Creators	
Signature	Charles C. Cary Reg. #: 36,764	
Date	August 4, 2006	

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Typed or printed name	Charles C. Cary	
Signature	Date	August 4, 2006

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: REZVANI et al.

Attorney Docket No.: VELCP008X1C

Application No.: 09/779,789

Patent No.: US 6,985,521 B1

Filed: 02/07/2001

Date of Patent: Jan 10, 2006

Title: METHOD AND APPARATUS FOR
CHANNEL ESTIMATION FOR X-DSL
COMMUNICATIONS

Examiner: AHN, SAM K.

Group: 2637

CERTIFICATE OF MAILING

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Date: August 4, 2006

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Charles C Cary

REQUEST FOR CERTIFICATE OF CORRECTION

Attention Certificate of Corrections Branch
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Sir:

This communication is a request for Certificate of Correction for the above subject Patent No. 6,985,521. There are errors made by the Office in Claim 2, specifically the Office has substituted the Abstract into Claim 2 rather than the body of amended Claim 8 (renumbered Claim 2) as presented by the Applicant on August 15 2005 in a Petition for Amendment After Final which petition was accepted by the Examiner.

Certificate of Correction is requested to include the corrections in the following and indicated on PTO/SB/44 Form:

Amendment after Final filed on August 15, 2005 and specifically:

Page 3 lines 10-22 and Page 4 lines 1-6 encompassing the body of Amended Claim 8 which reads as follows:

Claim 8 (currently amended) The An apparatus of Claim 1, wherein the detector further comprises: for channel estimation in a communication device having a transmit path and a receive path both coupled to a communication medium, and the apparatus comprising:

a pseudo-random noise generator (PRN) coupled to the transmit path to inject a codeword into the transmit path;

a correlator coupled to the receive path to generate an ordered set of correlation coefficients corresponding with successive phasings of the codeword with respect to a received signal, and the correlator including:

- a detector to detect peaks within the ordered set of correlation coefficients including both a peak corresponding with a leakage signal together with at least one other peak corresponding to a reflection of the injected codeword by the communication medium, and the detector determining at least one of the offset between peaks or a relative magnitude of the peaks, thereby estimating the channel characteristics across the communication medium; and the detector including:
 - *a peak detector for detecting peaks within the ordered set of correlation coefficients;*
 - *a leakage peak detector for determining which among the peaks detected by said peak detector corresponds with the leakage peak; and*
 - *a sequencer for sequentially ordering the peaks corresponding with a time of receipt of each of the reflected signals with respect to the peak corresponding with the time of receipt of the leakage signal to estimate channel characteristics for the communication medium.*

Should there be any fee due in connection with the filing of this request, the Commissioner is hereby authorized to charge such fees to Deposit Account 50-1338 (Order No. **VELCP008X1C²**).

Thank you for your assistance in this matter. Do not hesitate to contact the undersigned as indicated below should you have any questions regarding this matter.

Respectfully submitted,



Date: August 4, 2006

Signed: _____
Charles C. Cary

Registration No. 36,764

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P. O. Box 2789
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AUG 11 2006

UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO. : US 6,985,521

DATED : Jan 10, 2006

INVENTOR(S) : Behrooz Rezvani; Sam Heidari; and Dale Smith

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Col. 14, lines 41-58 should be deleted and the following inserted:

– 2. An apparatus for channel estimation in a communication device having a transmit path and a receive path both coupled to a communication medium, and the apparatus comprising:
 a pseudo-random noise generator (PRN) coupled to the transmit path to inject a codeword into the transmit path;

a correlator coupled to the receive path to generate an ordered set of correlation coefficients corresponding with successive phasings of the codeword with respect to a received signal, and the correlator including:

a detector to detect peaks within the ordered set of correlation coefficients including both a peak corresponding with a leakage signal together with at least one other peak corresponding to a reflection of the injected codeword by the communication medium, and the detector determining at least one of the offset between peaks or a relative magnitude of the peaks, thereby estimating the channel characteristics across the communication medium, and the detector including:

a peak detector for detecting peaks within the ordered set of correlation coefficients;

a leakage peak detector for determining which among the peaks detected by said peak detector corresponds with the leakage peak; and

a sequencer for sequentially ordering the peaks corresponding with a time of receipt of each of the reflected signals with respect to the peak corresponding with the time of receipt of the leakage signal to estimate channel characteristics for the communication medium. –

MAILING ADDRESS OF SENDER:

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PATENT NO. 6,985,521

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